

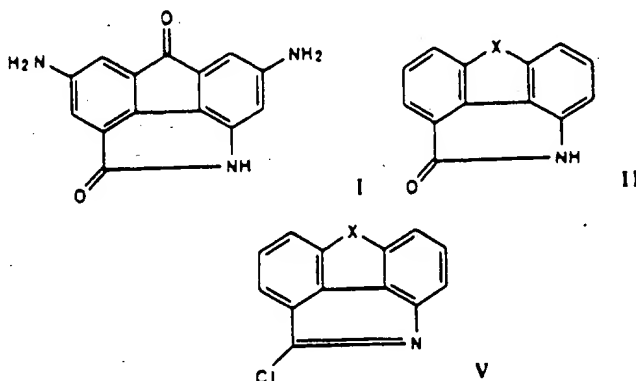
D12

XP-002087396

6001 Chemical Abstracts, Columbus, Ohio, US

Vol.: 88 (1978) March 27 No. 13Page: 505

88: 89502c **Derivatives of cyclopenta[k,l,m] phenanthridine.**
 Dokunikhin, N. S.; Migachev, G. I.; Grekhova, N. G. (Nauchn=
 o-Issled. Inst. Org. Poluprod. Krasitelei, Moscow, USSR). *Zh.*
Vses. Khim. O-va. 1977, 22(6), 706-7 (Russ). Nitration of



4-carboxy-9-fluorenone gave 96.5% 4-carboxy-2,5,7-trinitro-9-fluorenone, which was reduced and cyclized to give cyclopenta-phenanthridine I. Diazotization of I, followed by treatment with NaH_2PO_2 gave cyclopentaphenanthridinedione II ($\text{X} = \text{CO}$) (III). III was reduced with N_2H_4 to give II ($\text{X} = \text{CH}_2$) (IV). Treatment of III with PCl_5 gave V ($\text{X} = \text{CO}$); V ($\text{X} = \text{CH}_2$) was prepd. similarly from IV.

Best Available Copy

THIS PAGE BLANK (USPTO)

THIS PAGE BLANK (USPTO)